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MINIMUM SAFETY & SECURITY
REQUIREMENTS
FOR
SELF-COLLECTORS*)

As from: **October 2010**

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*) based on the Evonik-Requirements Profile on Road Haulage and Multimodal Transport (as from **October 2010**)

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Commercial Registry B 18877

Introduction

Transport performance quality is one of the key deciding factors for the quality of the transported goods in the chemical industry. Goods must be transported safely without harming the environment or impairing the quality while taking customer wishes into account. This results in increased requirements on the part of the logistics service provider involved which are laid down in the Evonik-Requirements Profile on Road Haulage and Multimodal Transport (as from **October 2010**).

Hence, the compliance with the minimum safety and security requirements of this Requirements Profile, which are given below, is expected even for customers of Evonik Industries collecting their goods by themselves or by logistics providers contracted by them. **Their scope is the national and international road haulage, including multimodal transport by road / rail and road / barge (including pre- and oncarriage to and from sea- and airports for the sea and air mode).**

When in the following text the term „self-collector“ is used, it means either customers collecting their goods by themselves or logistics providers contracted by them with the collection of the goods.

These requirements, which are given below, will be inspected in our plants either at the gates by the security officers and by the personnel of the loading sites. Disregarding of these requirements can lead to rejection of the provided vehicle.

Even though that the obligation of the self-collector to meet the requirements of all legal regulations is not affected by this minimum safety and security requirements, certain legal requirements, which are particularly important for Evonik Industries, are highlighted.

1 Vehicles, containers and additional equipment

- 1.1 Vehicles, containers and additional equipment used for loading and unloading must be in proper technical condition and must make a good visual impression while complying with legal and other official regulations as well as the additional requirements for the goods to be loaded set when the order was awarded.
- 1.2 Vehicles and loading units comply must be in compliance with the requirements of the intended transport operators, in particular those of multi-modal traffic (including Ro / Ro ferries).
- 1.3 The requirements included in the Annexes 1 to 4 (as far as relevant) must be heeded as well.
- 1.4 Vehicles used to transport dangerous goods with a high danger potential (cf. table 1.10.5 ADR/RID) must be fitted with devices / equipment (ideally this can be an electronic immobiliser, or as a minimum requirement a mechanical immobiliser) or alternatively procedures against theft of the vehicle and/or cargo

- 1.5 Considering that for dangerous goods pursuant to subsection 7.5.1.1 of the ADR, the shipper (here: Evonik Industries) is responsible to determine whether the vehicle is in full compliance with the regulatory provisions and pursuant to subsection 7.5.1.2 of the ADR loading shall not be carried out if the examination shows that the vehicles do not have on board all, we point out, that we will reject vehicles if they do not comply to the valid statutory provisions. A. o. these include the equipment prescribed in subsections 8.1.4 and 8.1.5 of the ADR and to the to the equipment listed in the instructions in writing pursuant to subsection 5.4.3 ADR regarding carrying out of general and any additional and/or special measures. However, for transport pursuant to subsection 1.1.3.6 of the ADR, the relief measures regarding vehicle equipment and personal protective equipment may be used. In case additional equipment, such as breathing protection for escape or other equipment not listed in subsections 8.1.4 or 8.1.5 of ADR should be required for certain dangerous goods, the contractor will be notified in writing of this by the client either generally or order-specifically (when the order is placed).
- 1.6 If a co-driver accompanies a given transport, the equipment items listed above as personal protective equipment, and a hand lamp, must be carried on board for the co-driver as well.

2 Persons involved in the transport

- 2.1 The self-collector shall use reliable, properly trained drivers who are in possession of a valid driving licence and sufficient driving practice; in the case of dangerous goods, the driver shall have the relevant training certificates in transport safety and instructions in transport security.
- 2.2 The self-collector is obliged to adhere to §§ 7b and 7c of the German law governing freight haulage (GüKG)¹. The driver shall be able to present the documents mentioned in § 7 of this law to Evonik Industries on request before loading.
- 2.3 The self-collector undertakes to organize the work of his driving staff so as to comply with the stipulations of Council Regulation (EEC) No 3821/85 regarding control devices in road traffic and chapter II of the Regulation (EC) No 561/2006 regarding harmonization of certain social regulations in road traffic (driving staff, driving times, interruption of transport and driving times).
- 2.4 Drivers shall familiarise themselves with the contents of the written instructions (transport emergency cards) and keep them in the cab of the vehicle.

¹ This means, that in case of domestic and border-crossing transports by hauliers, having their domicile in a EU member state or a state of the European Economy Area (EEA), drivers from third-party states may be employed only, if they are in possession of an employment permission prescribed by the state where the haulier is domiciled. This prevents, that unlawfully employed drivers from non-member states are used for the transport operation. The corresponding EU-Regulation No. 484/2002 (EC) from 1 March 2002, amending Council Regulations (EEC) No 881/92 and (EEC) No 3118/93 for the purposes of establishing a driver attestation, becomes valid on 1 March 2003.

- 2.5 The self-collector undertakes to ensure that plant-specific instructions from Evonik Industries and the recipient shall be followed.
- 2.6 Drivers shall wear the protection clothing prescribed during loading and unloading.
- 2.7 There is a general alcohol and drug ban when carrying Evonik Industries's shipments. Existing smoking and mobile phone bans in the sites of Evonik Industries and/or their customers must be observed.
- 2.8 Legally prescribed driving and rest periods shall be observed.
- 2.9 When dangerous goods are being transported, no person other than the vehicle crew may be driven in the vehicle.
- 2.10 Entering vehicle tanks / containers is not permitted on principle. If someone does enter, the regulations governing occupational health and safety and other relevant regulations shall be observed.
- 2.11 The self-collector must ensure that the drivers and their vehicles are always effectively secured against unintended rolling (fixing brake and, if necessary, use of wheel chocks).
- 2.12 Drivers shall remain in or at their vehicle during loading and unloading or officially inform a person responsible from Evonik Industries when they are present and when they leave the vehicle.
- 2.13 Drivers are always obliged to have the following personal protective equipment with them at the Evonik Industries plant and to wear it when they leave their vehicles:
 - .1 Clothes which completely cover the body
 - .2 Protective shoes (acc. to EN 345),
 - .3 Hard hat
 - .4 Protective glasses (if dangerous goods are being loaded or unloaded)
- 2.14 In appropriately marked parts of the Evonik Industries plants, the self-collector's drivers are also obliged to wear the following additional protective equipment during loading and unloading work:
 - .1 Protective clothing (according to the goods to be loaded)
 - .2 Chemical-resistant protective gloves (according to the goods to be loaded)
 - .3 Tight-fitting protective goggles (obligatory)
 - .4 Tight-fitting face mask (for liquids)
- 2.15 The completeness of the personal protective equipment according to 2.13, or if appropriate 2.14 and – in the case of dangerous goods – pursuant to 1.5, will be checked on entering the plant grounds. Vehicles which do not carry the necessary minimum protective equipment or the equipment required pursuant to the instructions in writing pursuant to 5.4.3 ADR may be rejected at the plant gate.
- 2.16 If a co-driver accompanies a given transport, the equipment items comprising personal protective equipment must be carried on board for the co-driver as well.

2.17 In the case of imminent danger (e.g. due to product leak or reaction) in the course of transport, the driver shall immediately take all the necessary measures – taking basic principles of self-protection into account – which seem suitable in the given situation to avert danger for third parties, environment, animals or the load or to prevent damage.

2.18 The self-collector shall make sure that in the vehicle the instructions in writing according to subsection 5.4.3 ADR are carried in a language that the crew can read, understand, and apply.

2.19 The plant-specific codes of conduct displayed at our sites and/or contained in the vehicle pass (such as wearing of personal protective equipment, speed limits, photography and mobile phone bans etc.) as well as any other site-specific requirements that the self-collector has been notified of separately shall be complied with.

The self-collector's driving crew shall obey the instructions of our site personnel.

Any traffic accidents or damage to buildings, devices, vehicles and plants or contamination of soil, open water or sewer at our premises caused by the self-collector's driving crew must be reported immediately to the site security or the site fire services, regardless of who was at fault.

When the vehicle enters our site, no passengers other than the registered co-driver may be in the vehicle.

Furthermore, the crew and the vehicle may not remain on the site unnecessarily (e.g. driving breaks that are not connected with the loading or unloading of the vehicle).

2.20 Documents to be provided by the self-collector's driver regarding transportation of dangerous goods according to ADR (such as the driver's training certificate according to subsection 8.2.1 or approval certificates according to subsection 9.1.3 ADR) must be provided as originals on principle.

Before loading, we must ensure that these documents are original. Since this is not always possible without a doubt in case of laminated documents, some persons of the shipping departments in our sites refuse to accept laminated documents on principle (apart from countries that issue these documents officially already laminated) and therefore deny to load such vehicles. To prevent this, self-collector's are highly advised to confirm in advance whether laminated documents will be accepted by the the shipping department of the respective loading site.

3.21 Drivers of road tankers or silo vehicles must be trained to use personal fall protection equipment.

3 Transport security

- 3.1 The self-collector undertakes to ensure that authorization for collection the load must be demonstrated by the driving staff. It must be possible to identify the vehicle and the entire vehicle crew (by official identity card with photo). This should prevent the goods from being transferred to unauthorised persons.
- 3.2 The self-collector undertakes to ensure that the driver will be able to present the following documents:
- .1 Authorization for collection by which Evonik Industries is able to identify the load to be transferred and the vehicle. This authorization should be an official, written load order (with name of the haulier, product description, order identity number and, if applicable, recipient of the goods) from Evonik Industries. Alternatively, Evonik Industries will accept verbal information from the driver or a document containing this information which has been prepared by the driver himself.
 - .2 Valid official identity card with photos (e.g. passport, driving licence, social insurance card, etc.), through which Evonik Industries can identify the driver. If the official identity card presented is not a driving licence, this must be presented in addition, if demanded by the entrance control officer.
- 3.3 If Evonik Industries has announced dangerous goods with high danger potential (see indicative list in Section 1.10.5 ADR) for loading, the self-collector shall ensure that its company has a security plan according to sub-section 1.10.3.2 ADR.
- 3.4 The self-collector shall ensure that internal organizational measures are implemented by which the requirements of the Council Regulation (EC) No 2580/2001 regarding restrictive measures applying to certain persons and organizations for the purpose of fighting terrorism and of the Council Regulation (EC) No 881/2002 regarding use of certain specific restrictive measures against certain persons and organizations in connection with Osama Bin Laden, the Al-Qaida network and the Taliban.

4 Safe and environmentally-friendly transport

- 4.1 The road safety and the completeness of the vehicle equipment shall be checked by the driver before the transport takes place. The prescribed or agreed equipment shall be carried on all the vehicles until the transport has been completed.
- 4.2 The max. permissible gross weight of the vehicle and the max. permissible load per axle must not be exceeded.
- 4.3 Safe transport routes shall be chosen (i.e. preferably motorways, if necessary by-passing designated protected areas, avoidance of routes through pure residential areas).
- 4.4 If vehicles with dangerous loads are parked, they must be guarded or parked such that sufficient security is guaranteed. The applicable provisions of Chapter 8.4 ADR in conjunction with Annex 2, 2.2 GGVSE must be complied with.

- 4.5 Reloading of complete and partial loads requires the agreement of Evonik Industries. If reloading is required during the transportation, the same requirements must be imposed on the vehicle qualities, drivers, etc as during loading at the Evonik Industries plant.
- 4.6 The self-collector shall ensure that both the cargo securing measures carried out by Evonik Industries as well as the ones applied by himself are checked during the course of the transport at regular intervals (e.g. during rest breaks) or after unusual strain has been placed on the load (e.g. after extreme braking, abrupt evasive action etc.) and retightened if necessary; this is valid in particular when the cargo securing measures originally applied have been changed (such as happens during reloading and partial unloading / adding of load or after problems caused by traffic and weather during the journey).
- 4.7 If Evonik Industries's products, particularly dangerous goods, become damaged or out of control during transport , Evonik Industries shall be informed immediately.

- 4.8 Damaged packagings containing products of Evonik Industries may only be further transported with the explicit permission of Evonik Industries; this is valid in particular in the case of dangerous goods, for which the applicable regulations have to be observed.
- 4.9 When passing tunnels and bridges, the respective national and/or local tunnel and bridges regulations shall be strictly observed.

5 Accidents / Damage / Loss

- 5.1 The position stipulated in the transport emergency card or the one specified by Evonik Industries shall be informed without delay of any accidents – including the following data:
- .1 Name and company of the reporting person
 - .2 Registration number and type of vehicle, transport company and forwarding agent
 - .3 Place and time of the accident / damage caused and description of how it happened
 - .4 Number of injured / dead, extent of product leaked, police / fire brigade present
 - .5 Consignment data (order number, destination, transport company, forwarding agent)
 - .6 Measures carried out or arranged by the driver
 - .7 Possibility of calling back for further information (name, address, telephone, fax)
 - .8 If appropriate, the loss adjuster involved (name, address, telephone, fax)
- 5.2 In cases where people are placed in danger and / or the environment has been harmed, the fire brigade and / or the police shall always be informed immediately. Directly afterwards, Evonik Industries shall be informed as follows:
- .1 In the case of dangerous goods, under the emergency telephone number given in the written instructions for behaviour in emergencies and after incidents (Transport Emergency Cards).
 - .2 In the case of non-dangerous goods, either under the emergency telephone number or, if this is unknown, under the telephone number given in the order documents.
 - .3 The Evonik Industries TUIS (Transport incident and information system maintained by the German Chemical Industry Association) telephone hotline number for transport incidents, accidents and emergencies with Evonik Industries goods involved read as follows:

++49-(0)02365-49-2232

Annex 1

Liquid and dry bulk goods in tanks, tank / silo vehicles and containers

The self-collector shall ensure that:

A.1.1 Technical components

- A.1.1.1 Containers, emptying devices, pumps and any hose material carried by the vehicle, fittings, seals, venting- and pressure compensation pipes shall be clean, dry and free of odours, providing no different product-specific agreements have been made.
- A.1.1.2 Suitable technical and optically fault-free and pressure-tested hose material shall be used.
- A.1.1.3 Hose material which is used for fixed products / product groups, shall be clearly marked and may only be used for these fixed products / product groups.
- A.1.1.4 For liquids, pressure tanks shall be made of stainless steel providing no other additional requirements exist.
- A.1.1.5 The necessary container approvals and test certificates related to the product to be transported shall be carried in the vehicle.
- A.1.1.6 Before filling all the emptying devices and after filling all the filling devices shall be closed properly.
- A.1.1.7 The vehicle shall be fitted with a clearly marked and functional grounding device.
- A.1.1.8 Proof of cleaning (as per A.1.3) or if cleaning is not necessary, certificate of the previous product (as per A.1.4) shall be provided to Evonik Industries's personnel at the loading site before loading.
- A.1.1.9 Cleaned containers and feeding lines shall be free of any residue from previous transport jobs.
- A.1.1.10 The self-collector's loading staff shall be reliably informed about the capacity of the tank or the tank chambers or the maximum permissible load to be added.
- A.1.1.11 Air pressure (e .g. generated by a compressor) may not be used for the unloading of flammable liquids.
- A.1.1.12 Liquids (not viscous) not classified as dangerous goods are treated by Evonik Industries analogously to the provisions of the dangerous goods regulations in respect of the minimum degree of filling for tanks for safety reasons (to avoid dangerous sloshing). Thus, the self-collector has to ensure that tanks presented for

loading are either at least 80% or at most 20% full with the material being transported, unless the tanks are divided by partition or by baffles into compartments/sections equal/less than 7500 L.

Exceptions from this guiding principle require the consent of Evonik Industries.

In particular, if the shipper is not a company of the Evonik Industries group, under some circumstances other (normally less restrictive) regulations can be applicable. This has to be queried by the self-collector on a case-by-case basis.

- A.1.1.13 For transport of products for which Evonik Industries requires a certified standard pursuant to GMP 01 and GMP 07 (such as for certain fillers and food/feed additives), the self-collector must not provide bulk cargo space which had ever previously been used for the transport of forbidden substances or materials of freight category 1 ("Transport-Exclusion List"), such as meat-and-bone meal. Exceptions to this are bulk loading areas, which, after the transport of such substances/materials, these bulk cargo spaces have been recertified/released for the transport of food and feed stuffs by suitable cleaning and sanitising under stringent conditions followed by an assessment of the cleaned cargo space by an EN 45004 accredited inspection body (being specifically approved for the inspection of bulk cargo spaces).
- A.1.1.14 To facilitate secure lead-sealing of the tank lids and outlets, the self-collector must carry on board a sufficient number of customs sealing lines.

A.1.2 Cleaning stations

- A.1.2.1 The self-collector is responsible for the selection of suitable and reliable cleaning stations.
- A.1.2.2 Cleaning station regarded as suitable is a station which has the necessary authorization (with regard to operation and disposal) and carries out cleaning and disposal in line with legal regulations and official approval certificates.

A.1.3 Proof of cleaning

- A.1.3.1 All cleaning companies are obliged to issue proof of cleaning which clearly states that the tank / silo has been cleaned properly. It is recommended that the "European Cleaning Document" (example see Attachment) is used for this.
- A.1.3.2 The proof of cleaning should include the following minimum standards:
- .1 Format of the document: DIN A4
 - .2 Current, unique numbering, safeguarded against duplication and forgery
 - .3 The document must contain at least the following information:

- Identification of the tank cleaning plant with full address, fiscal and commercial information and – where available – national membership and a reference to EFTCO
 - Identification of the customer (contractual partner)
 - Identification of the vehicle / tank
 - Arrival and departure times of the vehicle
 - Information about the cleaning work done in which the pre-determined code for the cleaning (tank, hoses, pumps, valves) is used.
This nomenclature is available in six languages and has been accepted by all national associations of the cleaning plant operators. The EFTCO Cleaning Code can be downloaded as a PDF file from <http://www.eftco.org>. This nomenclature can also be expanded to include additional codes and languages.
 - For each cleaned compartment, information about the last loaded product with technical description and UN number.
- .4 Signature of the cleaning manager and the contractual partner's representative (generally the driver)

Note:

- Non-binding: Information about the next load
- The cleaning process is either printed in full and marked with an "X" or printed out in full after successful cleaning with details of the steps carried out.

A.1.4 Confirmation about previous load

A.1.4.1 Self-collectors whose tanks / silos are reloaded upon agreement without being cleaned shall guarantee that confirmation about the previous product (example see Attachment), which shall contain at least the following details, is drawn up and presented.

- .1 Name of the logistics service provider
- .2 Number of the vehicle, tank, chamber
- .3 Product
 - chemical-technical description (not simply the trade name)
 - dangerous goods class
- .4 Last Evonik Industries order number and loading date
- .5 Voucher number, date, stamp, signature

These details can also be recorded on the pick-up note.

A.1.4.3 The company issuing the confirmation about previous load shall make sure that no impurities whatsoever (e.g. dust, foreign particles, condensation) have entered the tank/silo after unloading and that the tank/silo is sent for renewed loading in a closed state.

A.1.5 Inspection before loading

The self-collector shall allow the Evonik Industries's personnel the opportunity of checking the proper condition of the tank / silo and the emptying equipment before loading.

A.1.6 Rejection of vehicles

Silo and tank vehicles, detachable tanks as well as tank and silo containers used for the transport of food and feedstuff are principally not permitted to be used for Evonik Industries products.

Exemptions to this basic rule are possible for Evonik Industries's products which are destined for the food or feed industries (e.g. feed additives). If the situation is unclear, agreement shall be obtained from Evonik Industries before the vehicle is provided for loading.

A.1.7 Security during transport

Tank / silo vehicles and tank / silo containers loaded with dangerous goods

- .1 Shall either be monitored by the driver during stops or parked on fenced or guarded grounds;
- .2 Shall never be parked in residential areas;
- .3 May be parked only on the self-collector's plant grounds or on secured parking spaces over the weekend and on national holidays;
- .4 Notice will be sent to the control centre / fleet management of the self-collector or the local authorities on vehicles parked over the weekend and on national holidays giving their position

Annex 2

Packaged goods in vehicles and containers

The self-collector shall ensure that:

- A.2.1 Only vehicles / containers with cleanly swept, dry, nail-free and a cargo area that can be used by a fork-lift truck are provided for loading.
- A.2.2 Only vehicles / containers with on-board, reusable cargo securing equipment such as
 - .1 Blocking agents (such as clamping and insertion boards, mobile intermediate walls)
 - .2 Lashing elements (such as standardised straps [LC 0 \geq 2,500 daN (straight tensile pull and STF 300 daN, chains, ropes, nets)
 - .3 Cargo areas with retractable lashing rings, anchor point rails or retaining points are used.
- A.2.3 Walls, floor and roof as well as doors, door seals and weather protection are in technically perfect condition.
- A.2.6 The load is secured reliably through to the unloading station and is secured again if and when this is necessary; this is particularly valid for partial unloading, reloading, problems caused by traffic and weather; this also includes pronounced braking and/or avoidance manoeuvres).
- A.2.8 Specific segregation requirements of Evonik Industries set out in the shipping orders must be strictly observed.
- A.2.9 Vehicles which are clearly recognisable as ones transporting food and feedstuff or which can be presumed to be transporting food and feedstuff due to advertising on the vehicle, shall not be provided for loading (exemptions from this basic rule are possible for Evonik Industries products which are destined for the food or feed industries (e.g. feed additives); if the situation is unclear. Agreement shall be obtained from Evonik Industries before the vehicle is sent for collection).
- A.2.10 Vehicles provided for loading are not pre-loaded with feed and / or food stuff and that in the course of the transport, no feed and / or food stuff will be co-loaded on the same cargo transport unit together with products of Evonik Industries classified as dangerous substances or dangerous goods. Accordingly, no vehicles may be provided for loading of products of Evonik Industries used as additives in the food or feed production industries (such as certain fillers and feed additives) that have been used to transport freight goods classified as dangerous substances and/or dangerous freight goods.

A.2.11 The durability of the cargo area complies with the European standard EN 283 as far as fork-lift trucks driving on it is concerned and generally complies with the requirement for body stability acc. to EN 12642 (also see further details in Annex 4).

A.2.12 Vehicles carry a sufficient number of correctly-proportioned cargo-securing devices, e.g. for palletized goods or IBCs per pallet row at least one fastening belt with ratchet pursuant to EN 12195 in technical proper condition, for the fixing of the load units by strength locking or form locking by direct lashing (deviations to this principle requirement, e.g. due to intended form locking by filling up empty spaces, has to be agreed by Evonik Industries).

Remarks (apply to all vehicle types):

When lashing down, the belts must be fastened such that the maximum permissible vehicle width of 2.55 m is not exceeded.

Make sure that belts cannot fall off the vehicle during transport.

The self-collector does not allow belt anchoring using the vehicle tailboards.

A.2.13 Vehicles registered after 01.10.93 with respect to retractable lashing / anchor points on or in the cargo area and, as far as possible, are retrofitted on the tailboards (drop sides).

Remarks (apply to all vehicle types):

Vehicles without sufficient equipment regarding the anchor points and without sufficiently strong tailboards cannot be loaded

A.2.14 For standard sheeted sideboard vehicles (tautliners/curtainaiders, see annex 4), canopy battens (insertion battens), provided these comprise part of the vehicle body, must be complete and undamaged (at least till the upper edge of the load).

A.2.17 Cargo securing devices of tautliners/curtainaiders at least fulfil the requirements of Annex 4.

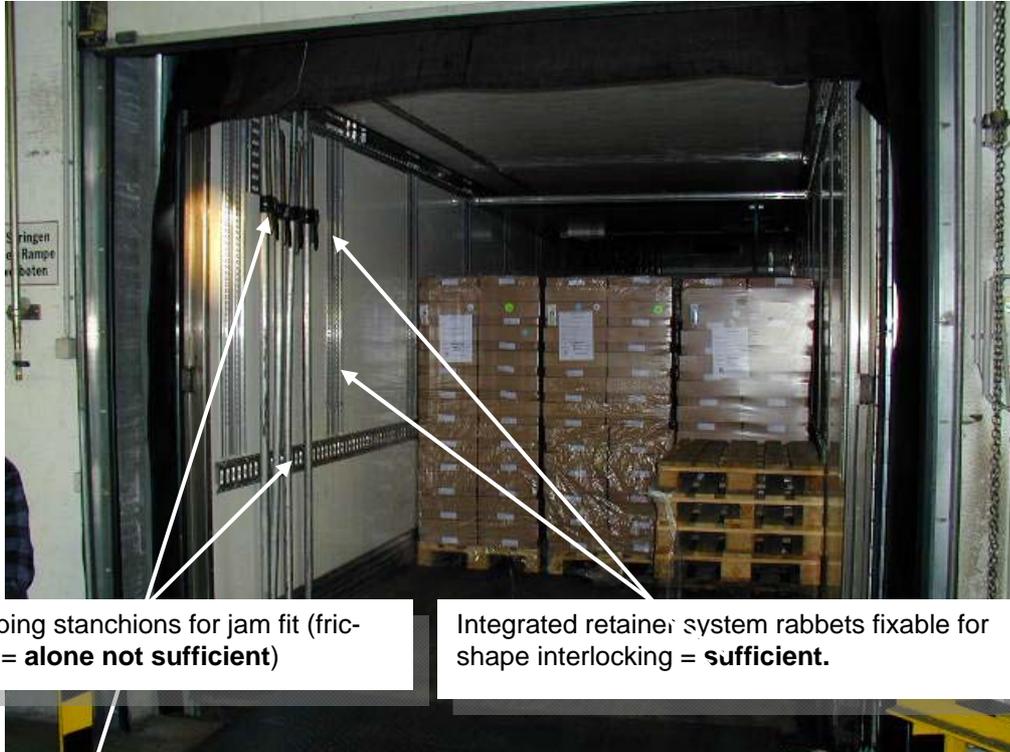
A.2.18 If box-type bodies are used, they must be equipped with a suitable retention system (e.g. a suitable number of telescoping stanchions in terms of the nature and weight of the cargo load that can be fixed for form locking) to secure the load in the direction opposite to the direction of driving.

Remarks:

The load can also be lashed by the self-collector by means of diagonal lashing if a sufficient number of anchor points are provided as per EN 12 640 as well as belts.

The use of telescoping stanchions positioned only for frictional locking and therefore exerting practically no physically effective force (except in the case of extremely light goods with a retention force < 50 daN) will not be accepted by Evonik Industries.

Example:



Telescoping stanchions for jam fit (frictional fit = **alone not sufficient**)

Integrated retainer system rabbits fixable for shape interlocking = **sufficient.**

A.2.19 If Evonik Industries accepts foreign partial loads, loading of these foreign partial loads onto vehicles provided by the self-collector must be ensured to be properly carried out in accordance with the relevant laws and guidelines.

Remark:

Carrying out of securing measures and/or load transfers of partial loads will be rejected by Evonik Industries for reasons related to insurance contingencies. If necessary, sufficient load securing / load distribution of the partial load must be realized by the driver on site. If this is not possible, Evonik Industries may reject the vehicle.

A.2.20 No vehicles with single-axle trailers or trailers with tandem axles with an axle distance of less than 1 m may be provided for loading.

Remark:

Due to problems with load distribution and the position of the centre of gravity of the load, as well as possibly exceeding the load of the trailer coupling, single-axle trailers and trailers with tandem axles with an axle distance less than 1 m are basically not loaded by Evonik Industries. Exceptions from this guiding principle require Evonik Industries's express consent.

A.2.21 If there are empty pallets on the vehicle provided for loading that interfere with proper stowing of the scheduled cargo, they must be unloaded (assuming Evonik Industries is in agreement with this).

Remarks:

If loading of the empty pallets interfering with loading is not feasible or if Evonik Industries does not agree to unloading on site, the vehicle may be rejected.

A.2.21 applies analogously when providing curtainsiders (see Annex 4).

A.2.22 The loading space of vehicles provided for the transport of products of Evonik Industries used for the production of food and feedstuffs (such as certain silicas, fillers, amino acids), must be clean (i. e. absolutely free of any residue and odour of previous loads) and dry.

Annex 3

Use of ferries (Ro/Ro vessels)

The self-collector shall ensure that:

- A.3.1 In the case of the transport of dangerous goods, combined freight and passenger ferries are only used if they have permission to transport the particular dangerous goods involved.
- A.3.2 Shipping companies can prove how they guarantee correct storage and securing of the trailers / containers on board and what the procedure is in bad weather and emergencies (Evonik Industries reserves the right to request such proof).
- A.3.3 Container chassis and other road vehicles are fitted with devices (such as suitable and enough lashing points on the vehicle and devices to block the spring mechanism of the vehicle), which make safe lashing on board possible and prevent the transport unit being shifted by rough sea.

Evonik-specific additional requirements:

Annex 4

Requirement for curtainsiders / tautliners

Table of contents

- A.4.1 Table of contents
- A.4.2 Introduction
 - A.4.2.1 Flowchart
- A.4.3 Definitions
 - A.4.3.1 Requirements for cargo securing
 - A.4.3.2 Form locking
 - A.4.3.3 Force locking cargo securing by lashing down
 - A.4.3.4 Frictional locking
 - A.4.3.5 Diagonal or direct lashing
- A.4.4 Requirements for different vehicle bodies / consequences
 - A.4.4.1 General requirements for all vehicle bodies
 - A.4.4.2 Requirements for curtainsiders/tautliners with certification as per EN 12642 (Code XL)
 - A.4.4.3 Requirements for curtainsiders/tautliners with certification as per EN 12642 (Code L)
 - A.4.4.4 Requirements for curtainsiders/tautliners without certification of body strength (not listed in EN 12642)
 - A.4.4.5 Curtainsiders/tautliners without certification of body strength (not listed in EN 12642) and with technical deficits leading to rejection
- A.4.5 Special conditions pertaining to cargo loading
 - A.4.5.1 Vehicles loaded with foreign cargo
 - A.4.5.2 Special aspects of securing cargo in multimodal transport road → ship/ferry
 - A.4.5.3 Special aspects of securing cargo in multimodal transport road → rail
 - A.4.5.4 Stacked cargo loading (exception)

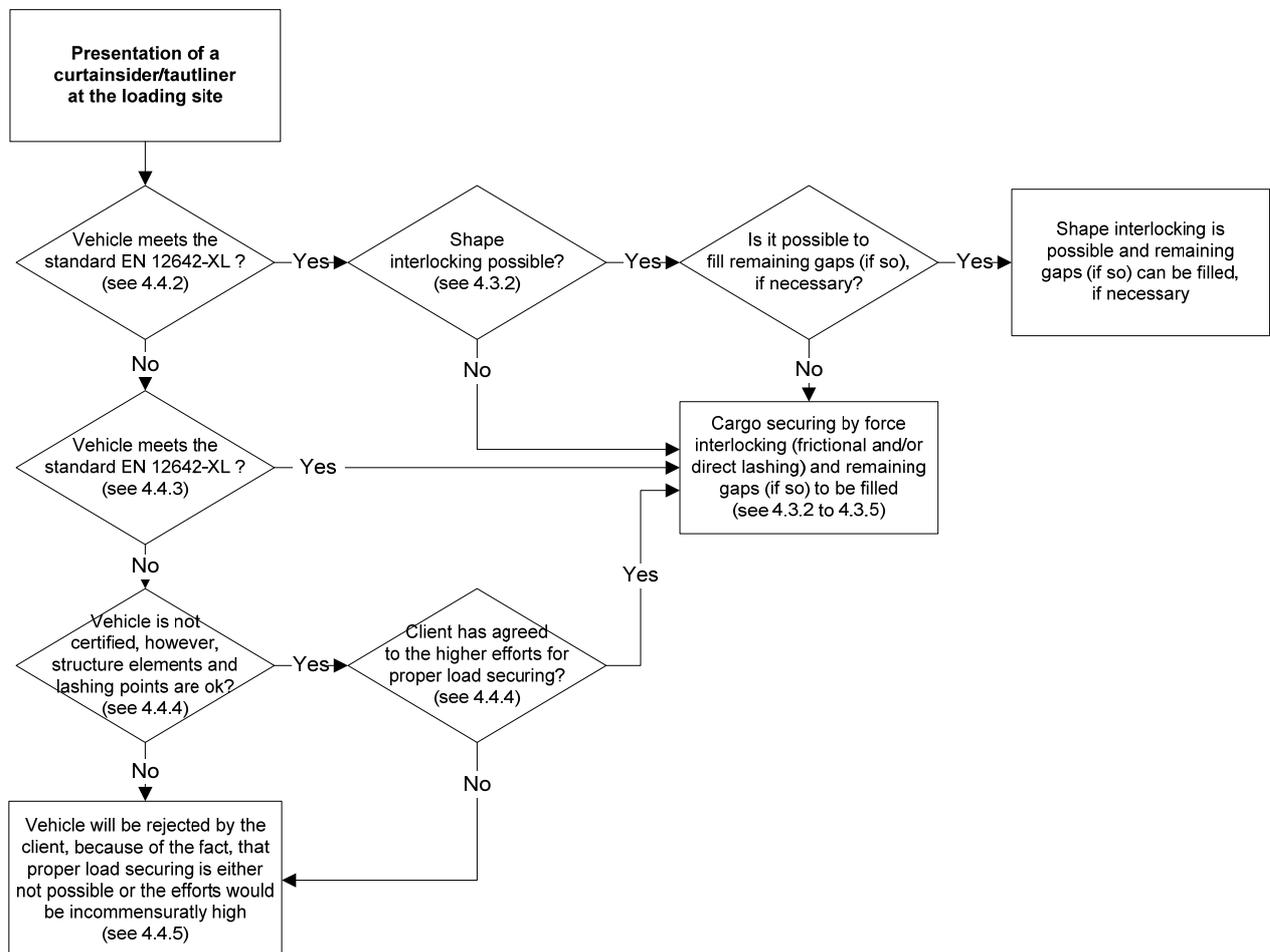
A.4.2 Introduction

The objective of the following stipulations is to carry out transports as safely, rapidly and economically as possible to the satisfaction of all parties involved. New vehicle body types are taken into account that reduce the amount of work involved in cargo securing without compromising safety. The focus is on the use of form locking cargo securing methods which are the most advantageous methods for safety and user advantage assessed in terms of efficiency and practicability.

To this end, the requirements for the different variants of these vehicle types are listed in section A.4.4.

The self-explanatory flowchart (see below) makes it clear which vehicle body types are preferred by Evonik Industries (because they are the most efficient), which types Evonik Industries will tolerate (i.e. involving more work to secure the load) and which types will be rejected (since pertinent technical deficits either do not allow for proper cargo securing or would make it inordinately costly). The test standard also applies in general to vehicle bodies (also e.g. sheeted side board and box-type bodies) over 7.5 t permissible laden weight (see also Annex 2).

A.4.2.1 Flowchart



A.4.3 Definitions

A.4.3.1 Requirements for cargo securing

A.4.3.1.1 German Highway Code (StVO) § 22 (new as of 1.1.2006)

“(1) The load, as well as devices, tension chains and other cargo loading and securing equipment must be stowed and secured in such a manner that they will not, completely or partially, slide, fall over, roll back and forth or cause avoidable noise, even upon full brake application or sudden swerving to avoid a collision. The generally applicable rules of engineering apply.”

A.4.3.1.2 Special case dangerous freight; ADR 7.5.7.1 (excerpt)

“Shipping items containing dangerous freight and unpackaged dangerous freight must be secured by suitable means (e.g. straps, sliding walls, adjustable supports) capable of restraining the freight items or containers in such a manner that movement during transport altering the position of the shipping items or resulting in damage to them is prevented. If dangerous freight is transported together with other freight items (e.g. heavy machines or crates), all freight items in the vehicles or containers must be secured and packaged so that no dangerous freight substances can leak out.”

A.4.3.2 Form locking

Form locking means, for example, complete utilization of the space available on a vehicle loading area.

The term form locking must be understood as follows in association with load securing in terms of the weight and size of the packaging/loading unit. The following descriptions provide assistance in applying this to loading of units with CP 1, CP 2 and CP 3 pallets:

- Max. load gap per pallet unit in direction of driving ≤ 1 cm (sum total max. 4 cm after max. 4.8 metres of load).
- Max. load gap per pallet row crosswise to direction of driving ≤ 5 cm (assuming a max. inside width of 2,480 mm.).
- Load gaps in excess of the above limits must either be filled or load securing must be ensured using force locking methods.

The preconditions for form locking loading is a loading unit/package that is sufficiently stable to withstand transshipment and transport (shipper obligation) and is capable of compensating the resulting acceleration forces.

Examples of form locking in vehicle bodies (also retrofittable) with high levels of lateral stability acc. to EN 12642 Code XL:

Securing drums:

Figure 1



Outside view

Figure 2



Cell construction

Figure 3



Gap filling

Securing FIBC and sacks:

Figure 4



Outside view

Figure 5



Cell construction

Figure 6



Gap filling

A.4.3.3 Force locking cargo securing by lashing down

Fixation of loads by means of permanent force application when lashing down. Lashing down is done with bidirectional lashing belts acc. to EN 12195 Part 2.

Figure 7



Lashing down

Figure 8



Belt label

A.4.3.4 Frictional locking

Frictional locking results from additional fixation of loads by raising the friction between pairs of materials. To maintain the efficacy of the friction, it is necessary to combine this with lashing down and/or direct lashing.

For the material pair wooden pallet / grid flooring, a coefficient of friction of μ (my) = 0.3 can normally be assumed. If there is any doubt of this, the friction should be increased as required to satisfy the calculation, (e.g. using friction agents).

A.4.3.5 Diagonal or direct lashing

Diagonal lashing is a form locking method of securing loads that can be readily realized, for example, with bidirectional lashing belts.

Figure 9



Direct lashing combined with lashing down

A.4.4 Requirements for different vehicle bodies / consequences

A.4.4.1 General requirements for all vehicle bodies

- Vehicle/loading space/loading area must be technically fault-free and clean when provided for use.
- The loads must be secured by means of form locking wherever possible.
- Equipment such as lashing belts, anchor points or structural elements such as front walls and lateral constructions must be technically fault-free.
- Hoop boards must be in place and technically fault-free at least up to the upper edge of the load.
- A 13.6 m semi trailer must have at least 12 pairs of anchor points (at regular intervals).
- Loading areas must be dry, free of adhesions and soiling (swept clean). If this is not the case, the deficiencies must be eliminated by the driver before cargo is loaded.
- The coefficient of friction between the vehicle floor and wood must be at least 0.3 (μ value).
- If friction agents have to be used depending on the particular cargo load, Evonik Industries shall provide such agents.

Cargo loading may be rejected by Evonik Industries if deficiencies regarding the above requirements are determined to exist (case-by-case basis).

A.4.4.2 Requirements for curtainsiders/tautliners with certification as per EN 12642 (Code XL)

The vehicle bodies in this category can safely absorb the acceleration forces occurring in normal traffic, e.g. arising from full braking or avoidance manoeuvres. Following brief movement within the vehicle body, it must be feasible to move the cargo load back to its original position. Vehicle bodies acc. to Code XL are suitable for form locking loading and are therefore the most advantageous curtainsider/tautliner type for efficient load securing.

A valid certificate must be kept on board for vehicle body types acc. to EN 12642 Code XL. If form locking loading is not possible due to the nature of the load, the load must be secured by force and/or frictional locking. For this reason, XL-coded vehicles must also always carry at least 12 lashing belts on board.

A.4.4.3 Requirements for curtainsiders/tautliners with certification as per EN 12642 (Code L)

When vehicle bodies capable of only partial absorption of the acceleration forces occurring in normal traffic, e.g. arising from full braking or avoidance manoeuvres are used, higher personnel and material expenditure levels are required to secure loads. The additional material expenditures include e.g. wooden pallets, anti-slide mats and bidirectional lashing belts.

A valid certificate must be kept on board for vehicle body types acc. to EN 12642 Code L.

If form locking loading is not possible due to the nature of the load, the load must be secured by force and/or frictional locking. For this reason, L-coded vehicles must also always carry at least 12 lashing belts on board.

A.4.4.4 Requirements for curtainsiders/tautliners without certification of body strength (not listed in EN 12642)

When vehicle bodies not capable of absorption of the acceleration forces occurring in normal traffic, e.g. arising from full braking or avoidance manoeuvres are used, much higher personnel and material expenditure levels are required to secure loads. Depending on the load, loading may have to be rejected, e.g. due to a lack of anchor points.

The additional material expenditures may include e.g. wooden pallets, anti-slide mats, bidirectional lashing belts and additional wooden frames.

Provision for use of vehicles of this type must be expressly approved by Evonik Industries.

A.4.4.5 Curtainsiders/tautliners without certification of body strength (not listed in EN 12642) and with technical deficits leading to rejection

The following figures show examples of vehicles that must be rejected due to technical deficiencies:

Figure 10



Insufficient number of anchor points

Figure 11



Defective hoop boards

Figure 12



Defective lashing belts or defective/insufficient number of anchor points

A.4.5 Special conditions pertaining to cargo loading

A.4.5.1 Vehicles loaded with foreign cargo

If vehicles are provided for use in which foreign cargo loads are already on the loading area, such cargo loads must already be sufficiently secured. If this is not the case, the driver shall be given an opportunity to secure the foreign cargo properly. If the driver cannot do this, loading of this vehicle will be rejected by Evonik Industries, even if it complies with all other preconditions.

A.4.5.2 Special aspects of securing cargo in multimodal transport road → ship/ferry

The packages / loading units must be able to absorb the acceleration forces exerted in the horizontal direction, and in particular in the vertical direction, during maritime shipping. It must be taken into account that, in accordance with the CTU Packing Guidelines, transverse acceleration forces in ferry transport of 0.5 g (Baltic) und 0.7g (North Sea) may be exerted upon the cargo load.

In maritime shipping, additional lashing down may be required due to the vertical acceleration forces.

This lashing down is only not required if

- The load can be loaded with form locking
- The vehicle body can safely absorb the acceleration forces as per EN 12642 Code XL via form locking and
- Regarding cylindrical goods in particular (such as drum goods), formation of load units prevents overriding

If the above preconditions are not met, much longer loading times must be assumed and must be taken into account by the self-collector accordingly.

A.4.5.3 Special aspects of securing cargo in multimodal transport road → rail

When selecting the means of transport, the increased acceleration forces of 1g (in both directions of movement) must be taken into account when securing the load.

A.4.5.4 Stacked cargo loading (exception)

Stacked cargo loading is only permissible if the acceleration forces are either proved to be safely absorbed by the vehicle body (also in the upper body section) or if force locking is used to secure the load. The additional regulations (see 7.5.7.2 ADR) relevant to dangerous freight goods must be complied with in addition to these requirements when such freight is transported.

If there is any doubt as to the stackability of the shipping items, it shall be left up to the Evonik Industries to decide whether or not cargo stacking is a permissible mode of loading and whether a packing layer must be inserted in between to help distribute the weight.

Attachment

		European Cleaning Document		
		D		
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.1; font-size: 100px; pointer-events: none;">EFTCO</div>				
1 Kunden-Referenznummer / Customer reference number*		2 Serien-Nummer / Serial Number		
3 Kunden-Daten / Customer		4 Behälter-Daten / Identification numbers Fahrzeug / Vehicle Anlagen / Silo / Container / IBC / Tank, Container		
5 ... / Name of product*		7 ... / Heat Load*		
6	8	9		10
UHM	Gewicht des Produkts Previous load Name / Name	Übertragene Arbeiten Cleaning Procedures EFTCO Code / Description*		
11 Zusätzliche Anmerkungen / Additional Services				
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.1; font-size: 100px; pointer-events: none;">original</div>				
12 Besenlagen / Containers				
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.1; font-size: 100px; pointer-events: none;">original</div>				
13 Name des Besenlagers / Name clean*		14 Datum / Time In*		
		Ende der Reinigung / Time Out		
Die Reinigungstation bescheinigt die oben aufgeführten Leistungen. Der Tank ist sauber nach EFTCO Definition. The cleaning station and the driver confirm that the above services to clean the tank have been carried out (see EFTCO definition of 'clean').				
15 Tankreinigungsgesellschaft / Cleaning Station		16 ... / Driver*		
Name / Name Unterschrift / Signature		Name / Name Unterschrift / Signature		

(* Optional)

Confirmation about previous load

Self-collector: _____ Date: _____ Voucher no.: _____

Freight carrier: _____

Registration number: _____

Tractor / trailer: _____

Container-no.: _____

 Type of vehicle: Silo Trailer Container

Chamber number	Last goods loaded	Dangerous goods class	Order number	Loading date	Remarks
1					
2					
3					
4					
5					
6					

 Tank material: V2A V4A Aluminium Rubberised Other: _____
 Total number of compartments: _____

The company issuing the confirmation shall make sure that no impurities whatsoever (e.g. dust, foreign particles, condensation) have entered the tank / silo after unloading and that the tank / silo is sent for renewed loading in a closed state.

We confirm that the above-specified tank/silo is being provided empty and uncleaned and do meet the above mentioned clause.

 Last use of the above marked vehicle type: _____
 from: _____
 to: _____
 on: _____

Name of the company
Location/Date
Name/Signature